to provide an insight regarding interrelationship between the psychological stress as one of the contributing factor towards acne among final year pharmacy students at International Islamic University Malaysia. **METHODS:** This cross sectional study was conducted by distributing questionnaire among 98 final year students. Information on severity of acne and level of stress was collected by using the Global Acne Severity Scale (GEA) and the Perceived Stress Scale (PSS) which is a psychological test for assessing stress. **RESULTS:** The results obtained shows that there is positive correlation between acne vulgaris and stress, however it is not significant. The severity of the acne such as the open and close comedones, into papules, pustules, and nodules and even cysts are also related with several factors which may exacerbate the acne conditions. Among those factors are gender and family history, exposure to sunlight, diet, lifestyle such as sleep and exercise, skin condition, and also intervention in solving acne problem. **CONCLUSIONS:** In conclusion, there is a positive relation between acne vulgaris and stress. The acne condition exacerbates in more stressful conditions.

PSS8

USE OF CONSUMER MARKET RESEARCH PANELS TO GENERATE PREVALENCE AND DISEASE BURDEN ESTIMATES IN DATA-SPARSE DISEASES: A CASE STUDY IN SEVERE CHRONIC HAND ECZEMA

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OBJECTIVES: Incidence and burden data for severe Chronic Hand Eczema (sCHE) is limited. In the absence of other means of gathering this data, the study's primary objective was to generate estimates for global 1-year period prevalence for sCHE. Secondary objectives included an estimate of sufferers whose condition is inadequately managed with topical steroids. **METHODS:** An online survey, aiming for nationally representative samples, to 34,765 respondents in USA, UK, France, Germany, Japan, India, Brazil, China, recruited via consumer panels. Respondents were classified sufferers of sCHE via questions on length of time experiencing symptoms, frequency and duration of flares, affected hand surface area, and on severity, using the photographic scale developed by Coenraads et al (2005). 147 sufferers meeting the qualifying criteria for sCHE completed questions on diagnosis, treatment and disease burden. **RESULTS:** We present our results in the form of descriptive statistics. An estimated global1-year period prevalence for sCHE of 0.54% was found, after data adjustment to reflect the population of 18-75 year olds by geographical region, and projection to total population. This is consistent with the range reported by Diepgen et al. (2007) (0.5%-0.7%). Of those classified as sCHE sufferers, 53% reported having received a medical diagnosis of sCHE; of these 80.2% had received treatment during the study period. 47% of those treated were classified as potentially refractory to topical steroids. The impact of the disease on the total sufferer population was greatest in social activities. **CONCLUSIONS:** Our results indicate a lower than expected diagnosis level of sCHE, given its prevalence and impact on sufferers. We also found that topical steroid treatment is unlikely to adequately control symptoms in significant numbers of cases of sCHE. We believe our methodology is an innovative alternative, consistent with a scientific approach, allowing sizing and understanding of sufferer populations, particularly in under-diagnosed conditions.

PSS9

THE PREVALENCE OF AGE-RELATED MACULAR DEGENERATION IN INDIAN POPULATION: A SYSTEMATIC REVIEW

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OBJECTIVES: Age-related macular degeneration (AMD) is the leading cause of visual impairment and blindness in India. A clear understanding of the AMD burden in India is essential to meet future demands for eye health care. The current analysis aims to evaluate the prevalence of AMD in India through a systematic review of published peer-reviewed studies. **METHODS:** Observational studies reporting the prevalence of AMD patients in India were retrieved from an electronic literature search in PubMed, Cochrane and EMBASE using the terms age-related macular degeneration, prevalence, and India. Search limits applied included articles in English, in human adults, and published since the year 2004. Two researchers independently extracted the data along with critical appraisal of the studies. Descriptive statistics was performed for comparable outcomes. **RESULTS:** A total of seven studies met the inclusion criteria. The overall prevalence of AMD in India ranges from 1.4% to 3.1%. The prevalence was lowest in West India (1.4%) and highest in South India (3.1%). We found a higher prevalence of early AMD than late AMD (2.3% vs. 0.6%). AMD was more prevalent in rural areas than in urban (2.3% vs.2.1%) and in females than males (2.5% vs. 1.9%). The most important demographic factor affecting the prevalence of AMD in India appears to be the age (>65 years). **CONCLUSIONS:** The prevalence of AMD in India has been increasing over the years. It is an emerging challenge for eye care and public health professionals in India. Further studies in Indian population are warranted to investigate the epidemiological patterns of specific AMD subtypes.

SENSORY SYSTEMS DISORDERS – Cost Studies

PSS10

A FIRST STUDY TO DETERMINE THE ECONOMIC IMPACT OF DENTAL CAVITIES IN COLOMBIA FOR 2011

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OBJECTIVES: According to the burden disease calculated by Ramirez et. al. (2005), in Colombia dental cavities represented the third disease with most DALYs for both genders in all age groups. Also, the Ministry of Health and Social Protection (2012) reported that dental cavities were a leading cause of morbidity in 2011 with 1.360.619 occurrences in the health system. Because of this, we decided to determine the economic cost of dental cavities in Colombia from the third-payer and patient perspectives for year 2011. **METHODS:** We used the official SISPRO data to get information regarding the number of visits per patient who had dental cavities. To calculate the monetary costs, we assumed that a treatment was provided to every patient who visited the dentist according to the national dental cavities guideline, all related costs were obtained from the SOAT fare manual 2011 reported by the government. We multiplied the treatment cost for each patient by the total number of dental visits to obtain the third-payer cost. We calculated from the patient´s perspective the lost output as a result of a reduction of productivity due to dental cavities, using DALYs, multiplied by the 2011 current GDP divided by the working-age population. **RESULTS:** The Economic impact for 2011 was USD 67.018.016. This is the result of adding the third-payer cost of USD 56.234.161 plus the patient cost of USD 10.783.855. **CONCLUSIONS:** With this first approximation to the economic impact of dental cavities the government can design cost-effective oral health policies to reduce its prevalence for Colombia's population. The cost of dental cavities represents 0.02% of 2011 current GDP, this means that on average there is an expenditure of USD 1.46 for each Colombian citizen to treat dental cavities. Those numbers shows the importance to generate permanent public policies to improve the Colombians´ oral health.

PSS11

RECENT COST TRENDS IN PATIENTS USING BIOLOGIC THERAPIES FOR THE TREATMENT OF PSORIASIS

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OBJECTIVES: Psoriasis (PSO) is an immune-mediated systemic inflammatory disease. The therapeutic classes available to treat PSO include biologic drugs. Despite rising wholesale acquisition costs of biologics in recent years, little documented evidence is available on cost trends from the US managed care perspective. This analysis determines the change in healthcare costs for PSO patients to managed care organizations. **METHODS:** Continuously enrolled adult patients with ≥2 outpatient diagnoses for PSO (ICD-9: 696.1) were selected from the MarketScan Commercial and Medicare Supplemental databases if their first biologic prescription date (index date) occurred July 2008 through July 2013 and they were biologic naive ≥6 months pre-index. Healthcare costs were based on annual reimbursements for 6 patient cohorts initiating biologic therapy from 2008 to 2013. Results were stratified by all-cause vs. PSO-related costs and further subdivided into medical inpatient, medical outpatient, emergency room, and pharmacy costs. **RESULTS:** 13,045 patients met the inclusion criteria and composed the 6 cohorts. All-cause annual healthcare costs for the years 2008-2013 were $27,973, $31,507, $35,006, $38,533, $42,289, and $43,431, showing increases of 55.3% overall and averaging 11.1% or $3,092 annually. Respective PSO-related estimated annual costs were $19,991, $21,976, $25,059, $27,853, $31,575, and $32,739, showing increases of 63.8% overall and averaging 12.8% or $2,550 annually. Although costs increased over time in all categories assessed, the major driver of this trend was PSO-related pharmacy costs, predominantly the cost of biologic therapies. These costs were estimated for the years 2008-2013 at $15,871, $18,032, $21,403, $22,880, $27,899, and $29,240, showing increases of 84.2% overall and averaging 16.8% or $2,674 annually. **CONCLUSIONS:** For US managed care payers, total healthcare cost incurred for patients initiated on biologic therapy for PSO has increased substantially in recent years, primarily driven by changes in PSO-related pharmacy costs.

PSS12

INJECTION FREQUENCY AND COSTS OF ANTI-VEGF TREATMENTS FOR NEOVASCULAR AGE-RELATED MACULAR DEGENERATION, RETINAL VEIN OCCLUSION, AND DIABETIC MACULAR EDEMA

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OBJECTIVES: Injection frequency and costs were examined for aflibercept 2.0 mg and ranibizumab 0.5 mg intravitreal injections in patients with neovascular age-related macular degeneration (AMD) or central retinal vein occlusion (RVO), and for ranibizumab 0.3 mg injections in patients with diabetic macular edema (DME). **METHODS:** This retrospective US claims study analyzed patients who started first-line treatment with ranibizumab or aflibercept (index date [ID]) between 11/18/2011-1/31/2014 for AMD, 9/21/2013-7/31/2014 for RVO, and 8/10/2012-1/31/2014 for DME, and met the following criteria: aged ≥18y on ID; no bilateral disease; ≥12 months continuous coverage before ID (baseline period); AMD, RVO or DME diagnosis (ICD-9-CM 362.52, 362.35, or 362.07) during baseline period or on ID; and 12 months of post-ID follow-up coverage without switching therapies. Twelve-month outcomes were number of injections and their respective costs. Injection frequency and costs were compared for aflibercept vs ranibizumab in multivariate regression models that adjusted for possible confounding variables (reference=ranibizumab, all comparisons). **RESULTS:** In AMD and RVO analyses, aflibercept (AMD:N=316, RVO:N=55) and ranibizumab (AMD:N=875; RVO:N=154) recipients had similar unadjusted mean number of injections (AMD:5.6 vs 5.3, respectively; RVO:4.5 vs 5.0, respectively) and related costs (AMD:$11,372 vs $10,856, respectively; RVO:$8219 vs $9733, respectively) at 12 months. In AMD regression analyses, number and costs of injections were not significantly different between aflibercept and ranibizumab (Incidence Rate Ratio [IRR]=1.05, 95% confidence interval [CI]=0.98-1.13, P=0.17; Cost Ratio [CR]=1.04, 95%CI=0.96-1.14, P=0.34). Similar results were seen for RVO (IRR=0.91, 95%CI=0.76-1.10, P= 0.35; CR=0.89, 95%CI=0.72-1.11, P=0.31). In DME patients (N=92), at 12 months, the mean (SD) number of ranibizumab 0.3 mg injections was 4.4 (2.9) and mean costs were $5289 ($3524). **CONCLUSIONS:** In AMD and RVO patients, injection frequency and costs for aflibercept and ranibizumab treatments were similar at 12 months. Mean annual costs of treating DME patients with ranibizumab were lower than for AMD and RVO patients.

PSS13

ESTIMATING THE PREVALENCE OF EQUINE RECURRENT UVEITIS AND THE ASSOCIATED LOSS OF VALUE FROM VISUAL IMPAIRMENT IN HORSES IN THE UNITED STATES

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